GS-2101 Airway Transportation Systems Specialist Department of Transportation Federal Aviation Administration

GS-2101

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

EDUCATION

Undergraduate and Graduate Education: Major study or at least 24 semester hours in any combination of the following: computer science, mathematics, electronics, physical sciences, information management, engineering, telecommunications, or other fields related to the position.

OR

EXPERIENCE

General Experience (for GS-5 positions): Experience that provided a basic knowledge of the principles of electronics, mathematics, computers, aeronautics, or related areas, or an understanding, both theoretical and practical, of automated systems operation, integration, management, and maintenance. Experienc e may have been gained in occupations such as computer specialist, electronics technician, telecommunications specialist, engineer, or other work related to the position to be filled.

Specialized Experience:

For GS-7 and GS-9: Experience that provided the opportunity to acquire and the need to apply practical and theoretical knowledge of the principles, functions, and processes associated with electronics and electricity concepts; computer systems and information management concepts telecommunication s concepts; and system management and integration methods.

For GS-11 and above: Experience that demonstrated an extensive knowledge of and experience in the technology, system interrelationships, and management of civilian or military automated aviation, navigation, and electronics systems.

GS-2102 Transportation Clerk and Assistant Series GS-2102

Use the "Group Coverage Qualification Standard for Clerical and Administrative Support Positions."

GS-2110 Transportation Industry Analysis Series GS-2110

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

EDUCATION

Undergraduate and Graduate Education: Major study—accounting, business administration, business or commercial law, commerce, economics, engineering, finance, industrial management, statistics, traffication, motor mechanics, or other fields related to the position.

OR

EXPERIENCE

General Experience (for GS-5 positions): Experience that provided a knowledge of economic, statistical, financial, operational, or market data or information pertaining to the business practices, market structures and trends, or competitive relationships of commercial organizations.

Specialized Experience (for positions above GS-5): Experience may have been gained with a carrier or shipper, carriers' or shippers' associations, transportation consulting organizations, State, local, or Federal regulatory bodies, or similar groups or organizations. Some positions may require specialized experience in a particular mode of transportation (e.g., air, railroad, motor carriers), or in a particular kind of traffic (e.g., passenger, freight), or both.

GS-2121

Railroad Safety Series

GS-2121

This is an individual qualification standard.

EDUCATION AND EXPERIENCE REQUIREMENTS

The following table shows the amounts of education and/or experience required to qualify for position s covered by this standard.

	EXPERIENCE OR EDUCATION		
GRADE	General	Specialized	
GS-5	3 years, 1 year of which was equivalent to at least GS-4	None	4-year course of study above high school leading to a bachelor's degree
GS-7	None	1 year equivalent to at least GS-5	None
GS-9	None	1 year equivalent to at least GS-7	None
GS-11	None	1 year equivalent to at least GS-9	None
GS-12 and above	None	1 year equivalent to at least next lower grade level	None

Equivalent combinations of education and experience are qualifying for positions at the GS-5 level only.

General Experience (for GS-5 positions): Experience that provided:

- Knowledge of the construction, operation, overhaul, maintenance, repair, or installation of mechanical, electrical, or electronic equipment used in an industrial setting;
- · Ability to read and understand written material; and
- Ability to read and interpret blueprints, specifications, or related technical material.

Qualifying general experience may have been gained in work such as:

- Machinist, electrician, switchtender, brakeman, fireman, or gang foreman with a railroad.
- Electrician in an industrial setting that involved evaluating blueprints for accuracy and tracing defects in circuitry.
- Repairing or installing industrial type diesel engines or electric motors.
- Engineering technician work that involved preparation of bluepri nts and testing or design of mechanical, electrical, or electronic equipment.
- Maintaining, inspecting, or testing bulk containers used to transport hazardous materials such a s explosives, compressed gases, poisons, or radioactive material on any mode of transportation.
- Installing or repairing mechanical, electronic, or electrical equipment, such as track or signal systems, on rapid transit systems.
- Firefighting or fire inspection involving industrial-type equipment in oil refineries or chemical plants.

OR

Education (for GS-5 positions only): Major study—engineering, electronics, physics, occupational or industrial safety, or other fields related to the position.

Education is not creditable for positions above the GS-5 level. The superior academic achievemen t provision *is not applicable* to positions in this series.

Specialized Experience (for positions above GS-5):

For GS-7: Experience that demonstrated:

- Knowledge of basic safety practices and techniques related to the railroad industry; and
- Basic inspection techniques.

For GS-9 and above: Experience that demonstrated:

- Knowledge of the railroad industry, including economic and operating considerations and equipment;
- Knowledge of the general safet y and health principles and practices applicable to the railroad industry;
- Knowledge of railroad accident investigation techniques; and
- Skill in written and oral communication.

In addition, applicants for inspector and specialist positions must demonstrate possession of the knowledge, skills, and abilities for the specialization for which application is made to the degree required by the position. Only those elements required by the position to be filled, as identified below, will be used in evaluating candidates' specialized experience.

Hazardous Materials:

- Practical knowledge of the typical reactions of different hazardous commodities to various environmental conditions and of safe procedures for containing or controlling fires, leaks, or explosions of these materials:
- Knowledge of the construction, testing, and retesting of containers used to ship hazardous materials by rail; and
- Knowledge of Federal regulations and standard s governing the shipment of hazardous materials by rail, including containerization, loading, handling, documentation, and placarding.

Track:

- Knowledge of railroad track system construction, maintenance, testing, or inspection techniques;
- · Knowledge of the capabilities and limitations of various track system configurations; and
- Knowledge of Federal railroad track safety standards.

Signals and Train Control:

- Knowledge of the design, installation, maintenance, testing, or inspection of signal and train contro 1 systems and their capabilities and limitations;
- Knowledge of applicable Federal law s and regulations pertaining to railroad signaling and train control systems; and
- Knowledge of locomotive braking systems and their relationship to and interface with train control or automatic train stop systems and braking distances.

Operating Practices:

- Knowledge of railroad operating practices, rules, and procedures, especially as they relate to safet y issues; and
- Knowledge of Federal regulations and standards relating to railroad operations and requirements in such areas as hours of service, accident reporting, blue signal protection of workers, rear end markers, radio communication, railroad employee qualifications, and railroad employee testing.

Motive Power and Equipment:

- Knowledge of the design, maintenance, or inspection of various types of locomotive and freight cars currently in use and their capabilities and limitations;
- Knowledge of the installation, maintenance, or testing of railroad safety appliances and power brakes, their capabilities and limitations; and
- Knowledge of the applicable Federal laws and regulations pertaining to inspection and testing of locomotives, freight cars, safety appliances, and power brakes.

Qualifying specialized experience may have been demonstrated in work such as:

- · Government railroad safety work.
- Signal maintainer, gang foreman, locomotive engineer, conductor, maintenance-of-way inspector, or yard master for a railroad.
- Inspector of work methods, final work products, or safety practices for a railroad equipmen t manufacturer.
- Hazardous materials work for other modes of transportation that involved interface with the railroa d industry.

INTERVIEW

Applicants may be required to demonstrate in a pre-employment interview that they possess the personal characteristics necessary for Railroad Safety work.

REQUIREMENTS FOR MOTOR VEHICLE OPERATION

Incumbents of positions in this series must possess and maintain a valid State motor vehicle operator's permit while they are employed in order to perform the duties of the positions.

Motor Carrier Safety Series

GS-2123

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

EDUCATION

Undergraduate and Graduate Education: Major study—accounting, business administration, business or commercial law, commerce, economics, engineering, finance, industrial management, statistics, traffication, motor mechanics, or other fields related to the position.

OR

EXPERIENCE

General Experience (for GS-5 positions): Experience that provided a general knowledge of business, commerce, data processing, transportation, or other related fields.

Specialized Experience (for positions above GS-5): Examples of qualifying specialized experience include:

- Federal or State regulatory agency or private enterprise work as an investigator, safety or compliance inspector, or safety specialist that required a working knowledge of motor carrier safety regulations and procedures; or that involved compliance enforcement, accident investigation; or related duties.
- Trucking association, motor carrier, national employee union, or similar work that required substantial knowledge of the Federal or State motor carrier safety and hazardous materials programs (i.e., laws, regulations, standards, policies, and practices), and that involved developing or providing technica 1 guidance to carriers covering such areas as equipment standards, safe operating practices, driver qualifications and hours of work, procedures for handling hazardous materials, loss prevention techniques, or procedures for maintaining compliance with Federal or State motor carrier safety regulations.
- Collecting, analyzing, and evaluating a comp lex body of data pertaining to motor carrier investigations, compliance reviews, business operations of companies, transpor tation industry, or other related subjects, using personal computers or other means, resolving conflicting data, and presenting concise written or oral reports of findings.

Highway Safety Series

GS-2125

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

EDUCATION

Undergraduate and Graduate Education: Major study—accounting, business administration, business or commercial law, commerce, economics, engineering, finance, industrial management, statistics, traffice management, transportation, motor mechanics, public administration, hazardous materials management, or other fields related to the position.

OR

EXPERIENCE

General Experience (for GS-5 positions): Experience that provided a general knowledge of safet y management, transportation, commerce, data processing, business, or other related fields.

Specialized Experience (for positions above GS-5): Examples of qualifying specialized experience include:

- Legislative/policy development, program planning, program evaluation, or program administration work concerned with highway, traffic, or motor vehicle safety, hazardous materials management, community planning, accident/injury prevention, or public health/safety or related administrative functions.
- Federal-State grant/aid or contract administration work involving managing, monitoring, or implementing technical or demonstration projects in highway or the related safety areas.
- Work involving development, enforcement, or interpretation of highway and related safety standards, regulations, or policies.
- Work involving development, review, and evaluation of systems for inspection and testing of vehicles to determine safety requirements and compliance.
- Work involving the development, evaluation, or administration of State or community highway or related safety education programs or of programs for licensing and training of motor vehicle operators.
- Work involving the identification of highway or re lated safety problems, or the analysis of safety trends or of factors affecting the safety characteristics and performance of vehicles.

Traffic Management Series

GS-2130

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

EDUCATION

Undergraduate and Graduate Education: Major study—accounting, business administration, business or commercial law, commerce, economics, engineering, finance, industrial management, statistics, traffication, motor mechanics, or other fields related to the position.

OR

EXPERIENCE

General Experience (for GS-5 positions): Experience that provided a general knowledge and under-standing of traffic or transportation programs or operations.

Specialized Experience (for positions above GS-5): Examples of qualifying specialized experience include:

- Managing or participating in managing a transportation or traffic program involving (1) operating a transport or traffic system to move passengers or commodities of an organization when there is accountability for operating costs, (2) operating a transportation system to provide common carrier types of services to shippers, and (3) procuring common or other carriers and other transportation services to move an organization's personnel, freight, and/or other commodities.
- Conducting or participating in conducting surveys and studies of the traffic management function, operating methods, procedures, and performance.
- Making presentations on traffic matters before Federal, State, or local regulatory bodies.
- Performing loss and damage prevention work when this included responsibilities such as policy and procedures formulation and studies of traffic operations and services.
- Negotiating with carriers and/or regulatory bodies on questions of rates, transit privileges and charges, special services and charges thereof, and classification of commodities.
- Providing advisory service involving commodity analysis from the transportation standpoint.

OR

CERTIFICATE

Possession of a certificate as Certified Member, American Society of Transportation and Logistics meets the requirements for GS-5. Persons with such certificates may also qualify for higher grade levels based on their education and/or experience.

Freight Rate Series

GS-2131

Use the "Group Coverage Qualification Standard for Clerical and Administrative Support Positions."

GS-2135

Transportation Loss and Damage Claims Examining Series

GS-2135

Use the "Group Coverage Qualification Standard for Clerical and Administrative Support Positions."

GS-2144

Cargo Scheduling Series

GS-2144

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Technical and Medical Support Positions."

Specialized Experience:

For GS-5 positions: Experience that provided a knowledge of transportation matters such as schedules, routes, bills of lading, manifests, classification of commodities, packaging and preservation, loss and damage prevention, transit privileges, rates, demurrage charges, diversions of shipments, handling costs, etc.

For positions at GS-6 and above: Experience that involved scheduling the movement of cargo into o r through one or more freight terminals in the appropriate amounts in order to balance the flow with the terminals' capacity to accommodate the freight and the carriers' capacity to transport the cargo.

OR

Education and Training:

For GS-5: Successful completion of a full 4-year course of study leading to a bachelor's degree (a) with major study in transportation or traffic management, economics, business administration, accounting, finance, statistics, or related fields, or (b) that included or was supplemented by at least 24 semester hours in such subjects.

GS-2150 Transportation Operations Series

GS-2150

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

EDUCATION

Undergraduate and Graduate Education: Major study—accounting, business administration, business or commercial law, commerce, economics, engineering, finance, industrial management, statistics, traffic management, transportation, motor mechanics, nautical science, marine a ffairs, marine engineering, marine transportation, or other fields related to the position. For Marine Transportation Specialist positions, education obtained in a Federal, State, or other accredited Merchant Marine Academy is qualifying.

OR

EXPERIENCE

General Experience (for GS-5 positions): For positions in this series other than Marine Transportation, experience that provided a general knowledge and understanding of traffic or transportation programs or operations. For Marine Transportation positions, experience must have been related to determining the terms and conditions for shipping cargo, coordinating storage, scheduling and shipment of goods and ship logistic requirements, such as berths, bunkers, crane service, and computing costs for cargo shipment.

Specialized Experience (for positions above GS-5): For positions other than Marine Transportation, experience in maintaining, retailing, purchasing, or procurement of automotive, rail, air, bus, or othe r transportation equipment or services, or in the operation of a comm ercial transportation facility or terminal. This experience must have demonstrated knowledge of fleet operations; familiarity with Federal, State, and municipal regulations governing the use of transportation vehicles; and the maintenance of inventories and cost computations.

For Marine Transportation positions, experience in:

- (1) Planning, directing, and supervising cargo or bulk petroleum movements such as:
- Embarkation and debarkation, cargo loading and discharge.
- Formulating marine transportation itineraries and routings according to commercial cost factors and tariffs.
- Formulating marine transportation traffic plans for personnel and cargo.
- · Scheduling ships.
- Developing, analyzing, or evaluating cargo lift capabilities.
- Preparing statistics for planning operations of ships, or formulating budgetary estimates of carg o transportation costs.
- Serving as a licensed merchant marine deck or engine officer or naval deck or engine officer.

or

- (2) Ship chartering negotiation or administration, such as:
- Chartering commercial ships and space.
- Reviewing and approving ship operating and damage expenses and marine insurance premiums.
- Investigating ocean carrier claims for ship damage.
- Reviewing and recommending action on cargo shortage and damage claims.
- Analyzing and applying appropriate precedents and regulations.
- Establishing rates with commercial carriers for special cargoes according to market conditions.
- Analyzing statements of ship operating costs, and preparing estimates to adjust rates or determine the most economical method of transportation.

Dispatching Series

GS-2151

Use the "Group Coverage Qualification Standard for Clerical and Administrative Support Positions."

GS-2152 Air Traffic Control Series

GS-2152

This is an individual qualification standard.

EXPERIENCE AND EDUCATION REQUIREMENTS

Applicants may meet minimum qualification requirements on the basis of experience, education, or, for GS-7 positions, one of the alternate provisions described below.

EXPERIENCE

General Experience (for GS-4 and GS-5): Progressively responsible experience that demonstrated the potential for learning and performing air traffic c ontrol work. Two years of such experience is required for GS-4 positions, and 3 years is required for GS-5 positions.

Specialized Experience (for GS-7 and above): Experience in a military or civilian air traffic facility that demonstrated possession of the knowledge, skills, and abilities required to perform the level of work of the specialization for which application is made. This experience must have provided a comprehensive knowledge of appropriate air traffic control laws, rules, and regulations.

Examples of specialized experience include:

For Station Positions: Providing information to pilots on such matters as weather, air routes, navigational aids, and airport conditions before and during flight. This specialization also requires:

- Judgment to select only essential and pertinent information from a great mass of data;
- Skill to present essential information to pilots clearly, concisely, and quickly before or during flight; and
- Ability to act decisively in emergency situations.

For Terminal Positions: Issuing control instructions and advice to pilots in the vicinity of airports t o assure proper separation of aircraft and to expedite their safe and efficient movement. This specialization also requires:

- Ability to act decisively under stressful situations and to maintain alertness over sustained periods o f
 pressure;
- Skill to coordinate plans and actions with pilots and other controllers; and
- Judgment to select and take the safest and most effective course of action from among several available choices.

For Center Positions: Controlling aircraft operating enroute along the airways to assure proper separation and safe and expeditious movement of such aircraft. This specialization also requires:

- Skill to control aircraft operating at very high speeds over great distances;
- Skill to arrange air traffic in patterns that assure maximum safety and minimum delay at points where such aircraft are "handed off" or transferred to other facilities or other sectors within the center; and
- Judgment to estimate when and whe re traffic congestion will build to a point that necessitates changing patterns, and to plan accordingly.

For Research and Development Positions: Experience in a terminal, station, or center that demonstrated the ability or potential to:

- Create, design, and/or develop new air traffic control systems or concepts; and
- Analyze, test, and evaluate current or new air traffic control procedures, methods, systems, or concepts.

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For Combination Positions: Positions involving a combination of the duties of two or more specializations require that applicants meet the qualification requirements for the appropriate specializations.

Up through GS-7, specialized experience in one specialization is fully qualifying for reassignment or promotion into another specialization. At GS-9 and above, experience and training in one specialization is qualifying for another specialization if the applicant's total background indicates that he or she can gain the knowledge, skills, and abilities required in the new assignment after a reasonable period of orientation and training. All positions at the full performance level of each specialization require skill and training in the work of the specialization.

For all specializations, qualifying specialized experience must have provided the ability to:

- Arrive quickly at well-reasoned solutions to complex problems;
- Adjust quickly to different assignments, changing conditions, and workload fluctuations;
- Remain calm and controlled during and after long periods of tension and fatigue; and
- Speak rapidly, clearly, and distinctly.

Level of Experience: For each grade level, creditable experience must have equipped applicants with the knowledge, skills, and abilities to perform the full range of duties of the position for which application is being made. Such experience is typically demonstrated by accomplishment of assignments of the difficulty and responsibility described in the position classification standard used to evaluate positions at the nex t lower grade level in the normal line of promotion to the position being filled.

OR

EDUCATION

For GS-5 Positions: A full 4-year course of study leading to a bachelor's degree meets the requirements for GS-5.

For GS-7 Positions: Superior academic achievement at the baccalaureate level or 1 full year of graduate study meets the requirements for GS-7.

OR

ALTERNATE REQUIREMENTS FOR GS-7 POSITIONS

Applicants who pass the written test qualify for GS-7 if they:

- Hold or have held an appropriate facility rating and have actively controlled air traffic in civilian or military air traffic control terminals or centers;
- Hold or have held an FAA certificate as a dispatcher for an air carrier;
- Hold or have held an instrument flight rating;
- Hold or have held an FAA certificate as a navigator or have been fully qualified as a Navigator / Bombardier in the Armed Forces;
- Have 350 hours of flight time as a copilot or higher and hold or have held a private certificate or equivalent Armed Forces rating;
- Have served as a rated Aerospace Defense Command Intercept Director; or
- Meet the requirements for GS-5 and pass the written test with an appropriately higher score.

MAXIMUM ENTRY AGE

Under the provisions of 5 U.S.C. 3307, a maximum entry age has b een established for Terminal and Center positions.

TEST REQUIREMENTS

Applicants for competitive appointment and inservice placement to all positions in this series at GS-7 and below must pass a written test. A written test may also be required for positions above GS-7.

PERSONAL QUALITIES

In addition to meeting all other requirements, applicants must demonstrate possession of the traits an d characteristics important in air traffic control work. Applicants who qualify in the written test and/or meet the experience and training requirements will be required to appear for a pre-employment interview t o determine whether they possess the personal characteristics necessary for performance of air traffic control work.

ADDITIONAL SCREENING REQUIREMENTS

Applicants who have passed the written test (and the interview, if required) may be required to pas s additional air traffic control aptitude screening for positions in the Department of Transportation, Federal Aviation Administration. Persons who do not pass the aptitude evaluation testing requirements will not be appointed to these positions.

TRAINING REQUIREMENTS

At all trainee and developmental levels, employees must learn the skills needed for operation at higher levels of responsibility. Failure of employees to meet training requirements for or accept promotion to higher grade air traffic control specialist positions may constitute grounds for reassignment, demotion, or separation from employment.

CERTIFICATE AND RATING REQUIREMENTS

Air traffic control specialists in all specializations must possess or obtain, within uniformly applicable time limits, the facility ratings required for full performance at the facility where the position is located.

Applicants must possess or obtain a valid Air Traffic Control Specialist Certificate and/or Control Tower Operator Certificate, if appropriate. These certificates require demonstrating knowledge of basi c meteorology, basic air navigation, standard air traffic control and communications procedures, the types and uses of air navigation aids, and regulations governing air traffic.

Facility ratings require demonstration of a knowledge of the kind and location of radio aids to air navigation, the terrain, the landmarks, the communications systems and circuits, and the procedure s peculiar to the area covered by the facility.

MEDICAL REQUIREMENTS

In general, air traffic control specialist applicants and employees must have the capacity to perform the essential functions of these positions without risk to themselves or others. The provision of sufficient information about physical capacity for employment requires that before appointment applicants undergo appropriate pre-employment physical/medical evaluations.

The physical impairments/medical conditions that follow, unless othe rwise noted, are disqualifying because there are medical and/or management reasons to conclude that an individual with such impairment/condition cannot perform the duties of the position without unacceptable risk to his or her own health, or to the health or safety of others (employees or the public).

REP

Initial Employment: Applicants for initial employment to air traffic control specialist positions must meet the following requirements. (Unless otherwise indicated, these requirements are identical for all specializations.)

A. Eye

- 1. Visual Acuity
 - a. Terminal and Center Positions—Applicants must demonstrate distant and near vision of 20/2 0 or better (Snellen or equivalent) in each eye separately. If glasses or contact lenses are required, refractive error that exceeds plus or minus 5.50 diopters of spherical equivalent or plus or minus 3.00 diopters of cylinder is disqualifying. The use of orthokeratology or radial keratotom y methods is not acceptable for purposes of meeting this requirement. The use of contact lenses for the correction of near vision only or the use of bifocal contact lenses for the correction of near vision is unacceptable.
 - b. Flight Service Station Positions—Applicants must demonstrate distant and near vision of 20/20 or better (Snellen or equivalent) in at least one eye. If glasses or contact lenses are required, a refractive error in at least one eye that exceeds pl us or minus 8.00 diopters of spherical equivalent will necessitate an ophthalmological consultation to establish absence of ocular patho-logy that could interfere with visual function. The use of contact lenses for the correction of near vision only or the use of bifocal contact lenses for the correction of near vision is unacceptable.

Equivalents in Near Visual Acuity Notations

Standard Test Chart: 14/14 Snellen Metric: 0.50M

Jaeger: J-1 Metric: 6/6

- 2. Color Vision—For all specializations, applicants must demonstrate normal color vision.
- 3. Visual Fields
 - a. Terminal and Center Positions—Applicants must demonstrate a normal central visual field, i.e, the field within 30 degrees of the fixation point, in each eye. T hey must also demonstrate a normal peripheral visual field, i.e., the field of vision beyond the central field that extends 140 degrees in the horizontal meridian and 100 degrees in the vertical meridian, in each eye.
 - b. Flight Service Station Positions—Applicants must demonstrate a normal central field of vision, i.e., the field within 30 degrees of the fixation point, in at least one eye.
- 4. Intraocular Pressure—For all specializations, if tonometry reveals either intraocular pressure greater than 20 mm of mercury, or a difference of 5 or more mm of mercury intraocular pressure between the two eyes, ophthalmological consultation is required to rule out the presence of glaucoma. If a diagnosis of glaucoma is made, or if any medication is routinely required for control of intraocular tension, the applicant is disqualified.
- 5. Phorias
 - a. Terminal and Center Positions—If an applicant demonstrates greater than 1-1/2 prism diopters of hyperphoria or greater than 10 prism diopters of esophoria or exophoria, evaluation by a qualified eye specialist is required. If this evaluation determines that bifoveal fixation and vergence-phoria relationships sufficient to prevent disruption of fusion under normal workin g conditions are not present, the applicant is disqualified.
 - b. Flight Service Station Positions—Applicants must demonstrate the absence of diplopia in the cardinal fields of gaze.

REF

- 6. Eye Pathology—For all specializations, if examination of either eye or adnexa reveals any form of glaucoma or cataract formation, uveitis, or any other acute or chronic pathological condition that would be likely to interfere with proper function or likely to progress to that degree, the applicant is disqualified.
- 7. *Chronic Eye Disease*—For all specializations, an applicant with any c hronic disease of either eye that may interfere with visual function is disqualified.
- 8. *Ocular Motility*—For terminal and center specialist positions, applicants must demonstrate ful 1 extraocular motility.
- 9. History of Eye Surgery—For all specializations, a history of ocular s urgery requires ophthalmological consultation. If consultation indicates that the condition that necessitated surgery could interfere with the visual function necessary for performance as an air traffic control specialist, the applicant is disqualified. A history of radial keratotomy is disqualifying.

B. Ear, Nose, Throat, Mouth

- 1. Examination must show no outer, middle, or inner ear disease, either acute or chronic, unilateral or bilateral.
- 2. Examination must show no active disease of either mastoid.
- 3. Examination must show no unhealed perforation of either eardrum.
- 4. Examination must show no deformity of either outer ear that might interfere with the use of headphones of the applied or semi-inserted type.
- 5. Examination must show no disease or deformity of the hard palate, soft palate, or tongue that interferes with enunciation. The applicant must demonstrate clearly understandable speech, and an absence of stuttering or stammering.
- 6. Applicants must demonstrate, by audiometry, no hearing loss in either ear of more than 25 decibels in the 500, 1000, or 2000 Hz ranges and must demonstrate no hearing loss in these ranges of more than 20 decibels in the better ear, using ISO (1964) or ANSI (1969) standards. Hearing loss in either ear of more than 40 decibels in the 4000 Hz range may necessitate an otological consultation. Incipient disease processes that may lead to early hearing loss will be cause for disqualification.

C. Cardiovascular

- 1. No medical history of any form of heart disease. Must demonstrate absence of heart disease t o clinical examination, including resting and post-exercise electrocardiogram.
- 2. Blood pressure levels no greater than the appropriate values as shown below:

Age	Maximum Reclining Blood Pressu		
	Systolic	Diastolic	
20 to 29	140	90	
30 to 39	150	90	
40 to 49	150	100	
50 & over	160	100	

- 3. Must demonstrate to X-ray no evidence of increase in heart size beyond normal limits.
- 4. An applicant under any form of treatment for any disease of the cardiov ascular system is disqualified.

D. Neurological

- 1. No medical history or clinical diagnosis of a convulsive disorder.
- 2. No medical history or clinical diagnosis of a disturbance of consciousness without satisfactor y medical explanation of the cause.

- 3. No other disease of the nervous system that would constitute a hazard to safety in the air traffi c control system.
- 4. An applicant under any form of treatment, including preventive treatment, of any disease of the nervous system, is disqualified.

E. Musculoskeletal

- 1. No deformity of spine or limbs of sufficient degree to interfere with satisfactory and safe performance of duty. Certain limitations of range of motion may be acceptable for certain specific options or positions, in which case acceptance of limitations will be noted specifically for that position or option only.
- 2. No absence of any extremity or digit or any portion thereof sufficient to interfere with the requirements for locomotion and manual dexterity of the position being sought. Acceptance of limitations for employment for a specific option or position will be noted for that option or position only.
- 3. No condition that predisposes to fatigue or discomfort induced by long periods of standing or sitting.

F. General Medical

- 1. No medical history or clinical diagnosis of diabetes mellitus.
- 2. Must possess such a body build as not to interfere with sitting in an ordinary office armchair.
- 3. Must have no other organic, functional, or structural disease, defect, or limitation found to indicate clinically a potential hazard to safety in the air t raffic control system. A pertinent history and clinical evaluation, including laboratory ev aluations, will be obtained, and when clinically indicated, special consultations or examinations will be accomplished.

G. Psychiatric

No established medical history or clinical diagnosis of any of the following:

- 1. A psychosis;
- 2. A neurosis; or
- 3. Any personality or mental disorder that clearly demonstrates a potential hazard to safety in the air traffic control system. Determinations will be based on medical case history (including past, social, and occupational adjustment) supported by clinical psychologists and board-certified psychiatrists, including such psychological tests as may be required as part of medical evaluation.

H. Substance Dependency

A history, review of all available records, and clinical and laboratory examination will be utilized to determine the presence or absence of substance dependency, including alcohol, narcotic, and non-narcotic drugs. Wherever clinically indicated, the applicant must demonstrate an absence of these on any clinical or psychological tests required as part of the medical evaluation.

Retention Requirements: The physical requirements in this section apply to: (1) air traffic control specialists in the center and terminal specializations who are actively engaged in the separation and control of air traffic, (2) immediate supervisors of air traffic control specialists actively engaged in the separation and control of air traffic, and (3) air traffic control specialists in the station specialization who regularly perform flight assistance services.

REP

Employees occupying the types of positions described above must requalify in an annual medica l examination, usually given during the employee's month of birth. Controllers incurring illness, injury, or incapacitation at any time between the annual examinations must be medically cleared before returning to air traffic control duty. Examinations, including laboratory tests and consultations, will be accomplished to the extent required to determine medical clearance for continued duty. New employees are required to meet the retention requirements by examination during the first 10 months of service.

Employees who are found to be n ot physically or emotionally qualified for air traffic control duties at any time will be subject to reassignment to a position for which they are f ully qualified, retirement for disability if eligible, or separation from the service.

To be medically qualified for retention, an air traffic control specialist must meet the followin g requirements. (Unless otherwise indicated these requirements are identical for all specializations.)

A. Eve

Retention requirements for vision and eye conditions are identical to the requirements for initial hire.

B. Ear, Nose, and Throat

- 1. Ear Disease; Equilibrium
 - a. Terminal and Center Positions—Must demonstrate no chronic disease of the outer or middle ear, unilateral or bilateral, that might interfere with the comfortable, efficient use of standar d headphone apparatus or that might interfere with accurate perception of voice transmissions or spoken communications. Must have no e ar disease that might cause a disturbance of equilibrium.
 - b. Flight Service Station Positions—Must demonstrate no chronic disease of the outer or middle ear, unilateral or bilateral, that might interfere with accurate perception of voice transmissions or spoken communications. Must have no e ar disease that might cause a disturbance of equilibrium.
- 2. Mastoid—No active disease of either mastoid.
- 3. Eardrum Perforation—Must demonstrate no unhealed perforation of either eardrum.
- 4. *Speech*—Must have no interference with enunciation, and must have clear speech free of stuttering or stammering.
- 5. Hearing Loss—No hearing loss in either ear of more than 30 decibel s in either the 500, 1000, or 2000 Hz ranges. No loss in the se ranges greater than 25 decibels in the better ear. Non-static hearing loss in either ear of greater than 50 decibels in the 4000 Hz range will require an otological consultation.

C. Cardiovascular

- 1. Heart Disease
 - a. Terminal and Center Positions—No history or symptomatic form of heart disease or any for m requiring therapy.
 - b. Flight Service Station Positions—No symptomatic form of heart disease.
- 2. *Disturbance of Rhythm; Other Abnormality; EKG*—Must demonstrate no disturbance of rhythm or other cardiac abnormality on clinical examination, including resting, and when clinically indicated, post-exercise electrocardiography.
- 3. Blood Pressure—Retention requirements are identical to the requirements for initial hire.
- 4. Heart Size—Must have no increase in heart size beyond normal limits.

D. Neurological

Retention requirements are identical to the requirements for initial hire.

E. Musculoskeletal

Retention requirements are identical to the requirements for initial hire.

F. General Medical

- 1. Diabetes Mellitus
 - a. Terminal and Center Positions—An employee who has an established clinical diagnosis of diabetes mellitus will be evaluated for continued duty based upon the degree of control of the disease. Whether by diet alone, or diet and hypoglycemic drugs, control that results in the absence of symptoms and the absence of complications of the disease or the therapy may be considered as satisfactory control. A controller with diabetes mellitus who cannot demonstrate satisfactory control over specified and observed periods of 48 hours is not cleared for duty involving active air traffic control.
 - b. Flight Service Station Positions—An employee who has an established clinical diagnosis of diabetes mellitus will be evaluated for continued duty based upon the degree of control of the disease. Whether by diet alone, or diet and hypoglycemic drugs, control that results in the absence of symptoms and the absence of complications of the disease or the therapy may be considered as satisfactory control.
- 2. Body Configuration—Must possess such a body build as not to interfere with sitting in an ordinary office armchair.
- 3. Other Medical Conditions—Must have no other organic, functional, or structural disease, defect, or limitation found to indicate clinically a potential hazard to safety in the air traffic control system. A pertinent history and clinical evaluation, including laboratory screening, will be obtained, and when clinically indicated, special consultations and examinations will be accomplished.

G. Psychiatric

- 1. Psychotic Disorder—No established medical history or clinical diagnosis of a psychosis.
- 2. *Mental, Neurotic, or Personality Disorder*—No neurosis, personality disorder, or mental disorder, that clearly indicates a potential hazard to safety in the air traffic control system. Determinations will be based on medical case hi story (including past, social, and occupational adjustment) supported by clinical psychologists and board-certified psychiatrists, including such psychological tests as may be required as part of medical evaluation.
- 3. Alcoholism and/or Alcohol Abuse—No clinical diagnosis of alcoholism or alcohol abuse, since these constitute a hazard to safety in the air traffic control system. A history and clinical evaluation, including laboratory evaluation (when indicated) will be accomplished to determine the presence or absence of alcohol addiction, dependency, habituation, abuse, or use.
- 4. Addiction, Dependency, Habituation, or Abuse of Dangerous Drugs—No clinical diagnosis of addiction, habituation, dependency, or abuse of any narcotic or non-narcotic drug, since thes e constitute a threat to safety in the air traffic control system. A history and clinical evaluation, including laboratory evaluation (when indicated), will be accomplished to determine the presence or absence of drug addiction, dependency, habituation, abuse, or use.

GS-2154 Air Traffic Assistance Series GS-2154

This is an individual qualification standard.

EXPERIENCE, EDUCATION, AND TRAINING REQUIREMENTS

All positions require experience, education, and/or training as indicated below. (Applicants who meet the requirements for a particular grade level also qualify for positions at lower grade levels.)

For GS-4 Level Positions:

General Experience: Two years of general experience, 1 year of which was equivalent to at least GS-3, that involved following written directions, procedures, or syst ematic work methods; and making immediate and rapid decisions concerning the proper course of action to be followed.

Qualifying general experience may have been gained in work such as:

- Railroad yard signal-tower operator involved in operating switching equipment and traffic signals to route train traffic in railroad yards.
- Dispatcher of trains or locomotives; transit coaches in automated mass transit systems; police, fire, ambulance, or other emergency vehicles and personnel; or taxicabs, buses, trucks, or other fleet vehicles.
- Water traffic control work.
- Radio, teletype, telephone, or computer operator.
- Customer service representative.

OR

Education/Training: Successful completion of 2 full years of education or training above the high school level in subjects such as aviation, flight mechanics, communications, data processing, electronics, or similar subjects in a college or university, or a technical or flying school.

OR

Equivalent combination of experience and education/training as described above.

For Positions at GS-5 and Above:

Specialized Experience: One year of specialized experience equivale nt to at least the next lower grade level that demonstrated knowledge of and skill in the use of Federal Aviation Administration (FAA) air traffic control procedures.

Qualifying specialized experience may have been gained in work such as:

- Civilian or military aircraft operations work, such as flight instructor, instrument rated pilot, fligh t engineer, or air transport pilot.
- FAA certified dispatcher for an air carrier.
- Flight information expediter involved in determining flight times of airplanes and transmittin g information to flight operations and command centers.
- Civilian or military air traffic controller.
- Flight data processor.

OR

Training: Successful completion of an FAA or military air traffic control training program.

OR

Certificate: Possession of an FAA Control Tower Operator certificate.

TRAINING REQUIREMENTS AS A CONDITION OF EMPLOYMENT

All persons appointed to Air Traffic Assistance positions are required to complete successfully a training program to gain specific job knowledge. Those failing to complete the program successfully may be separated, demoted, or reassigned.

TS-2

Marine Cargo Series

GS-2161

Use these individual occupational requirements in conjunction with the "Group Coverage Qualification Standard for Administrative and Management Positions."

EDUCATION

Undergraduate and Graduate Education: Major study—accounting, business administration, business or commercial law, commerce, economics, engineering, finance, industrial management, statistics, traffication, motor mechanics, or other fields related to the position.

OR

EXPERIENCE

General Experience (for GS-5 positions): Experience related to waterfront cargo handling or cargo layout and planning operations. This experience must have provided a knowledge of cargo loading aboard ships and a familiarity with marine terminal activities.

Other: Graduation from a Deck Officer course given by a State or Federal Maritime School or possession of a Coast Guard license as Third Officer or higher may be substituted for the experience requirements at the GS-5 level.

Specialized Experience (for positions above GS-5): Experience gained in (1) preparing preliminary cargo stowage plans, and/or (2) overseeing loading, stowage, and discharge operations to make certain that they conform to preliminary plans, or authorizing necessary changes and preparing final plans. This experience must have involved vessels of at least 5,000 dead-weight tons. It must also clearly show a comprehensive knowledge of marine rules and regulations and the ability to plan, direct, organize, and coordinate cargo handling activities; to interpret and apply policies; to investigate operations and practices and resolv e problems; and to establish and maintain effective work relationships. Experience in layout planning, shiploading, and cargo handling may have been gained during such seagoing and marine terminal assignments as service in the U.S. Navy as a cargo o fficer, similar service in the Merchant Marines, or employment by commercial steamship lines.

GS-2181 Aircraft Operation Series

GS-2181

This is an individual qualification standard. This standard should also be used to evaluate the pilot qualifications of candidates for positions having a requirement to fly airplanes and/or helicopters in the performance of their work, but are classified to other occupational series.

MINIMUM ELIGIBILITY REQUIREMENTS

Minimum eligibility requirements for positions in this occupation are based on possession of the appropriate Federal Aviation Administration (FAA) pilot certificates and/or appropriate military ratings, meeting the applicable flight hour requirements, and possession of the knowledge and skills required for the positions.

Certificates and Ratings: For all grade levels and specializations, candidates must possess a curren t Commercial Pilot Certificate or the appropriate military rating; both meet the intent of the requirement. If an agency decides, for example, not to accept the military rating, the rationale for the decision should be based upon the requirements of the position and should be thoroughly described in agency operating material. For flight instructor positions, the FAA Flight Instructor Certificate or the military equivalent rating is also required. The pilot certificate must include the rating(s) a ppropriate to the work of the position to be filled. For example, a position that involves flying a multi-engine airplane to various destinations under instrument flight rules would require the Commercial Pilot Certificate with the airplane, multi-engine, and instrument ratings or appropriate U.S. military ratings. Positions that require flying or instructing in flying both airplanes and helicopters require a rating in both categories. Only those ratings necessary to perform the work are required.

Note: Candidates establishing eligibility based on military flight experience must provide official orders, forms, or logbooks showing their status as a rated military pilot, flight instructor, or flight examiner, a s appropriate. Other certificates that meet or exceed the requirements of the Commercial Pilot Certificate are also acceptable, e.g., an Airline Transport Pilot Certificate.

Flight Experience: Candidates must demonstrate possession of the knowledge and skills required for the work by meeting certain minimum flight hour requirements, including recency of flight experience. The categories in which candidates are required to demonstrate proficiency relate to (1) the general knowledge and skills to pilot the aircraft, and (2) the specific knowledge and skills related to the particular position being filled. Only that flight experience that is directly related to the work of the position is required for purposes of establishing minimum eligibility.

MINIMUM FLIGHT HOUR REQUIREMENTS

The following flight hour requirements apply to all applicants:

- 1. Total Flight Time—Flight time as pilot-in-command or copilot in aircraft of any weight or category is creditable for this requirement. *For inservice placements actions*, up to one-fourth of the total flight hours may by waived for candidates who have demonstrated possession of the knowledge and skills needed to perform the work, provided:
 - They hold the certificates and ratings required;
 - They have acquired the pilot-in-command hours and flight hours in other categories essential to performance of the work;
 - They meet the requirements in terms of level and quality of experience; and
 - Their flying history indicates they are qualified for the position.
- 2. Pilot-In-Command—Only flight hours acquired as pilot-in-command are creditable.

GS-2181 (Continued)

- 3. Night Flying—For inservice placement actions at the GS-11 level and above, 25 hours may be waived if the candidate demonstrates the ability to perform the work.
- 4. Flying Time, Last 12 Months—Required only for positions that involve flying. The flight hour s specified apply to *competitive appointments*. For *inservice placement actions*, up to one-half of the flight hours may be waived provided the individual's total background reflects the ability to perform the duties of the position safely. For positions flying both helicopters and airplanes, at least one fourth of the total hours must be in either category of aircraft.

Category	Flight Hours	
	GS-9	GS-11 and above
1. Total Flight Time	1200	1500
2. Pilot-In-Command	250	250
3. Night Flying	50	75
4. Flying Time, Last 12 months	100	100

The following flight hour requirements apply *only* when the position requires the particular specialty.

- 5. Multi-engine Airplane—When the position requires operation of heavy multi-engine airplanes (i.e., gross takeoff weight in excess of 12,500 pounds) at least 50 percent of the flight hours must have been in such heavy airplanes, except as indicated below. Up to 250 hours flying time acquired in heavy helicopters (gross takeoff weight in excess of 12,500 pounds) may be substituted. For Airspace System Inspection Pilot positions with the FAA, experience may have been in either light or heavy multi-engine airplanes.
- 6. Heavy Helicopter—Up to 250 hours flying time acquired in heavy multi-engine airplanes may be substituted.
- 7. Instrument—At the GS-9 level, at least 5 of the required hours must have been logged in actual instrument weather. At the GS-11 level and above, at least 10 of the required hours must have been logged in actual instrument weather. The balance may have been acquired in a flight simulator or as other types of instrument flight time, e.g., hood instrument.
- 8. Instructor Time—Must be related to the nature of the instruction work and the category of aircraft operated (i.e., airplane or helicopter) in the position to be filled. If the purpose of the position is to provide instruction in instrument flight techniques, one-half of the flight time must have involve d instrument instruction in either airplanes or helicopters.

Category	Flight Hours		
	GS-9	GS-11 and above	
5. Multi-engine Airplane	100	500	
6. Heavy Helicopter	0	500	
7. Instrument	50	75	
8. Instructor Time	0	500	

REP

GS-2181 (Continued)

ADDITIONAL REQUIREMENTS FOR FLIGHT TEST PILOT

For flight test pilots, the minimum flight hour requirements shown for grades GS-11 and above ar e increased as follows:

Category	Flight Hours	
Total Flight Time	1750	
Pilot-In-Command	1150	

The notes above on Total Flight Time and Pilot-in-Com mand also apply to flight test pilot positions. Flight test positions also require completion of a fli ght test course such as a military flight test school or the FAA flight test pilot course, or at least 1 year of experience either f light testing aircraft for engineer-ing approval (civilian or military) or analyzing aircraft performance data.

MEDICAL REQUIREMENTS

At the time of initial appoint ment, candidates for all pilot positions must possess a current first or secondclass medical certificate in accordance with FAA regulations; both meet the intent of the requirement. If an agency decides, for example, not to accept the second-class medical certificate, the rationale for the decision should be based upon the requirements of the position, and should be thoroughly described in agency operating material. Staff specialists not involved in the operation of aircraft need only have a medical examination indicating that they are able to perform the duties of the position to be filled. For flight test pilots, airspace system inspection pilots, and Customs pilot s, all candidates must possess a current first class medical certificate at the time of appointment.

GS-2183 Air Navigation Series GS-2183

Most of these positions require military reserve technician status, and are filled through examining delegation agreements with the appropriate military department. If a standard is needed to fill other positions in this series, the employing agency should contact OPM for assistance.

GS-2185 Aircrew Technician Series GS-2185

Most of these positions require military reserve technician status, and are filled through examining delegation agreements with the appropriate military department. If a standard is needed to fill other positions in this series, the employing agency should contact OPM for assistance.

GS-2199 Transportation Student Trainee Series GS-2199

Use the "Group Coverage Qualification Standard for Competitive Service Student Trainee Positions," as appropriate to the appointing authority used.